

Patent
Serial No. 10/510,787
Amendment in Reply to Office Action of April 19, 2006

ABSTRACT:

A read/write head for an optical disk drive, ~~comprises~~
including a lens holder ~~(8)~~, a support frame ~~(11, 12, 16)~~,
means ~~(15)~~ for suspending the lens holder ~~(8)~~ in the support frame,
~~which means that~~ constrain movement of the lens holder ~~(8)~~ relative
to the support frame, allowing ~~only an at least~~ limited translation
in a ~~focussing~~focusing direction ~~(z)~~, parallel to the optical axis
of a lens ~~(7)~~ in the lens holder ~~(8)~~, an at least limited
translation in a tracking direction ~~(y)~~, perpendicular to the
~~focussing~~focusing direction ~~(z)~~, and an at least limited rotation
about an axis in a tangent direction ~~(x)~~, perpendicular to both the
~~focussing~~focusing and the tracking ~~directions~~directions. ~~and An~~
actuator means, ~~comprising only having~~ two conductive
~~focussing~~focusing coils ~~(9, 10)~~ with a winding axis parallel to the
~~focussing~~focusing direction ~~(z)~~, each positioned relative to a
magnetic circuit ~~(11, 12)~~ in such a way that a current flowing
through a coil ~~(9, 10)~~ gives rise to is arranged to provide a force
between the lens holder ~~(8)~~ and the support frame in the
~~focussing~~focusing direction ~~(z)~~. The winding axes of the two

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~~focussing~~focusing coils ~~(9, 10)~~ are positioned on opposite sides of a plane through the center of mass of the lens holder ~~(8)~~, and parallel to the ~~focussing~~focusing and the tangent direction. The ~~focussing~~ coils ~~(9, 10)~~ are spaced apart in the tangent direction ~~(x)~~.